



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,383	07/15/1999	TOSHIHIRO SHIMA	Q55113	3442

7590

07/09/2003

SUGHRUE MION ZINN MACPEAK & SEAS PLLC  
2100 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 200373202

EXAMINER

POON, KING Y

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 07/09/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

7

# Office Action Summary

Application No.

09/353,383

Applicant(s)

SHIMA, TOSHIHIRO

Examiner

King Y. Poon

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other:

Art Unit: 2624

### **DETAILED ACTION**

The declaration and power of attorney filed 9/21/1999 has been received

#### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 21 of fig. 2 is not mentioned in the description. Correction is required.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: network 11 mentioned on page 4, line 22, and page 5, line 3; and storage 29A mentioned at the first line of page 5 are not in the drawings. Correction is required.

Furthermore, reference signs in the drawings are different from the reference signs mentioned in the description.

For example, job data 37 in fig. 2, is being referred as job data 33 on page 5 of the specification. Correction is required.

Art Unit: 2624

***Specification***

3. The title of the invention is objected to because it is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. Furthermore, the disclosure is objected to because of the following informalities:

Examples of the informalities are: 21 of fig. 2 is not mentioned in the description; reference signs in the drawings are different from the reference signs mentioned in the description such as job data 37 in fig. 2, is being referred as job data 33 on page 5 of the specification.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The change made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b).

Art Unit: 2624

Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 3, 6, 8, 11-13, 16-18, 24, 25, 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Gase (US 6,184,996).

Regarding claim 1: Gase teaches a printing system (fig. 1) comprising: a host computer (client processor, column 3, lines 26-28) for generating job data (text/job data in a response, column 3, lines 28-29, which is generated by the client processor; also see column 1, lines 40-47) of a print job (print job, column 3, line 29); and a printer (printer 14, column 3, line 30) for receiving (column 5, lines 24-25) and printing (column 3, line 30) the job data from the host computer, (client processor, column 3, lines 26-28) wherein the printer (printer 14, column 3, lines 26-27) sends a job request (column 3, lines 26-27) to the host computer, and the host computer (client processor, column 3, lines 26-28) sends the job data (text, column 3, line 29) to the printer (printer 14, column 3, line 30) in response to the job request sent from the printer. (Column 3, lines 28-30)

Regarding claim 3: Gase teaches wherein the host computer (client processor, column 3, lines 26-28) sends job location data (URL, column 3, line 20) showing a location (located, column 3, line 28) of the job data (text, column 3, line 29) to the printer, (printer 14, column 3, line 30) and the printer (printer 14, column 3, line 30) sends the job request (request, column 3, line 27) to

Art Unit: 2624

the host computer (client processor, column 3, lines 26-28) which the job location data (URL, column 3, lines 26-29) shows.

Regarding claim 6: Gase teaches a method of sending job data (text, column 3, line 29) of a print job (column 3, line 29) to a printer (printer 14, column 3, line 30), comprising steps of: storing (application has a print job ready for submission to printer, column 3, lines 5-6, i.e., print job is already created and being held in the client processor before sending to the printer. The process that is preventing the host from losing the print job before it is being sent to the printer is storing) the job data (print job, column 3, line 5, print job consist of text data, column 3, line 29) in a host computer; sending a job request (request, column 3, line 25-30) from the printer (printer 14, column 3, lines 12) to the host computer; and sending the job data (print job, column 3, line 5, print job consist of text data, column 3, line 29) from the host computer to the printer in response to the job request. (Column 3, lines 24-30)

Regarding claim 8: Gase teaches a step of sending job location data (URL, column 3, lines 15-20) showing a location of the job data (column 3, lines 27-28) from the host computer (client processor, column 3, lines 19-20) to the printer, (printer 14, column 3, line 12) wherein, in the step of sending the job request, the printer sends the job request (column 3, lines 25-30) to a host computer which the job location data shows.

Regarding claim 11: Gase teaches a printer (printer 14, column 3, line 12) comprising: a job request section (the software code of the browser program that request print job, column 3, lines 25-30) for demanding job data (text of print job, column 3, lines 25-30) from a host

Art Unit: 2624

computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) having the job data; and a printing section (the software code of the program of the printer that controls the printer to received the transmitted text of a print job, column 3, lines 25-30, and the software code that controls the printer to print the text) for receiving and printing the job data sent from the host computer in response (response, column 3, line 29) to a request (request, column 3, line 27) from the job request section.

Note: Column 5, lines 1-10, Gase teaches the printer is controlled by software procedures. It is inherent that different procedures of the printer are controlled by different software code.

Regarding claim 12: Gase teaches wherein the job request section receives job location data (received URL, column 3, lines 15-20) showing a location of the job data (column 3, lines 18-20) from a print server, (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) and the job request section sends a job request (request, column 3, line 27) to the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) which the job location data shows (column 3, lines 15-30).

Regarding claim 13: Gase teaches the printer further comprising a print server (job queue 28, column 3, lines 24) for receiving job location data (URL, column 3, line 30-35) showing a location (located, column 3, line 28) of the job data (text of print job, column 3, line 27, column 3, line 29) from the host computer (client processor, column 3, lines 27, that the print job is

Art Unit: 2624

located, column 3, lines 5-8) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs are temporarily) wherein the job request section (the software code of the browser program that request print job, column 3, lines 25-30) sends the job request (column 3, lines 25-30) to the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) which the job location data (URL, column 3, lines 24-26) stored in the print server (job queue 28, column 3, lines 24) shows.

Regarding claim 16: Gase teaches a method of operating a printer, (printer 14, column 3, line 12) comprising steps of demanding job data (sending job request, column 3, lines 25-30) from a host computer (client processor that sends the text of a print job, column 3, lines 25-30) having the job data (text of a print job, column 3, lines 29-30); and receiving and printing the job data (column 3, lines 28-30) sent from the host computer (client, column 3, line 28) in response to a job request (request, column 3, line 27) of the demanding step.

Regarding claim 17: Gase teaches a step of receiving job location data (URL, column 3, line 20) lines showing a location of the job data (column 3, lines 27-28) from a print server (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), wherein in the step of demanding, the job request (request, column 3, lines 26-27) is sent to the host computer



Art Unit: 2624

(client processor, column 3, lines 28-30) which the job location data shows. (Column 3, lines 25-30)

Regarding claim 18: Gase teaches a step of receiving job location data (received URL, column 3, lines 17) showing a location of the job data (column 3, lines 25-30) from the host computer (client processor, column 3, line 27) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs is temporarily) wherein, in the step of demanding, the job request is sent to the host computer which the stored job location data shows (column 3, lines 25-30).

Regarding claim 24: Gase teaches a host computer (client processor, column 3, line 2) of a printer (printer, column 3, line 1, for printing print job for the client processor, column 3, lines 25-30) comprising: a storage (application has a print job ready for submission to printer, column 3, lines 5-6, i.e., print job is already created and being held in the client processor before sending to the printer. The process that is preventing the host from losing the print job before it is being sent to the printer is storing. It is inherent that storing a print job uses a storage) for storing job data of a print job; and a transmitter (the program code of the program module, column 1, lines 22-25, of the client processor that controls communicating a response, column 1, lines 41-43) for sending the stored job data to a printer (printer, column 3, line 24) in response (responds, column 3, line 29) to a job request (request, column 3, line 27) from the printer.

Art Unit: 2624

Note: It is inherently that when a computer using program modules/software for controlling the functions of the computer, different function of the computer requires different program code.

Regarding claim 25: Gase teaches the host computer further comprising a location information section (program code of the program module, column 1, lines 22-25, of the client processor that originated the message with the URL, column 3, lines 16-21) for sending job location data (URL, column 3, line 20) showing a location of the job data (located, column 3, lines 25-30) to one of the printer (the printer, column 3, lines 15-18) and a print server (since the claim calls for one of the printer and a server, showing one printer would meet the claimed limitations).

Regarding claim 28: Gase teaches a method of operating a host computer (client processor, column 3, line 2) of a printer, (printer, column 3, line 1, for printing print job for the client processor, column 3, lines 25-30), comprising steps of: storing job data of a print job; (application has a print job ready for submission to printer, column 3, lines 5-6, i.e., print job is already created and being held in the client processor before sending to the printer. The process that is preventing the host from losing the print job before it is being sent to the printer is storing); and sending (submission, column 3, line 6) the stored job data to a printer in response (responds, column 3, line 29) to a job request (request, column 3, line 27) from the printer.

Regarding claim 29: Gase teaches a step of sending job location data (URL, column 3, line 20) showing a location of the job data (located, column 3, lines 25-30) to one of the printer (the

Art Unit: 2624

printer, column 3, lines 15-18) and a print server (since the claim calls for one of the printer and a server, showing one printer would meet the claimed limitations).

Regarding claim 30: A record medium readable (note) by a computer on which a program for instructing a computer (client processor, fig. 1, column 3, line 2) to execute the following steps is recorded, the steps comprising: a step of storing (application has a print job ready for submission to printer, column 3, lines 5-6, i.e., print job is already created and being held in the client processor before sending to the printer. The process that is preventing the host from losing the print job before it is being sent to the printer is storing) job data of a print job (text of a print job, column 3, lines 25-30); and a step of sending (submission, column 3, line 6) the stored job data to a printer (printer 14, column 3, line 6, for printing print job for the client processor) in response (responds, column 3, line 29) to a job request (request, column 3, line 27) from the printer.

Note: Gase, column 1, lines 20-25, teaches the computer is running by operating system and program modules/software; it is inherently that a computer controlled by operating system and program modules/software requires a record medium readable by a computer for storing the operating system and program steps.

Regarding claim 31: Gase teaches wherein a program for instructing a computer to further execute a step of sending job location data (URL, column 3, line 20) showing a location of the job data (located, column 3, line 28) to one of the printer (the printer, column 3, lines 15-21) and a

Art Unit: 2624

print server (since the claim calls for one of the printer and a server, showing one printer would meet the claimed limitations) is recorded.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase as applied to claims 1, and 6 above and further in view of Debry (US 6,385,728).

Regarding claim 2: Gase teaches the printing system, further comprising a print server (the other client processor (not the host computer) that send the URL of a print job located at the host computer that has the print job, column 3, lines 5-10, each client processor is also a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), the server sends job location data (URL, column 3, lines 15- 21) to the printer, (printer 14, column 3, line 12) and the printer sends the job request (request, column 3, lines 27-28) to the host computer (client processor that the print job is residing) which the job location data shows. (Column 3, lines 25-30)

Art Unit: 2624

Gase does not teach wherein the host computer sends job location data showing a location of the job data to the printer server and the print server temporarily stores the job location data.

Debry, in the same area of sending a print request from a printer to a host computer to request a document to be printed by the printer, (column 11, lines 63-67, column 11, lines 1-5, fig. 5) teaches the host computer (file source, column 5, lines 20-25, document source, column 7, lines 16) sends job location data (column 7, lines 20-25, column 10, line 65) showing a location of the job data to the user's computer, (Column 6, lines 60-62), and the user's computer temporarily stores the job location data (The print job location information is located in the will call certificate, column 7, lines 15-25, and the will call certificate is being send with a job request, column 8, lines 65-67. Therefore, the will call certificate/print job location information is temporarily being stored in the user's computer from the time the user's computer received the will call certificate to the time the certificate being sent) before sending the job location data to a print server.

Since the computer used by a user would be used as a print server in Debry, column 6, lines 65-67, column 7, lines 1-2, and the client processor in Gase is a print server, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system to include: the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host), and the print server temporarily stores the job location data.

Art Unit: 2624

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system by the teaching of Debry because of the following reasons: (a) the user, column 3, lines 5-9, Gase, in one computer that may wish to have a print job that is presented in another computer submitted to the printer, would not have to walk to the another computer to check the URL of the print job or remembering the URL of the print job if Gase's computer system is being modified to have the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host); (b) it would have solved the problem created when a user would like to print a document in a remote location but the user's computer system is not secure, is having too much network traffic, or may not have storage space for receiving the print job, as taught by Debry at column 3, lines 44-65; and (c) temporarily storing the job location data would prevent the server from losing the job location data.

Regarding claim 7: Gase teaches: a print server (the other client processor that send the URL of a print job located at the host computer that has the print job, column 3, lines 5-10, each client processor is also a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), the server sends job location data (URL, column 3, lines 15- 21) to the printer, (printer 14, column 3, line 12) and wherein, in the step of sending job request, the printer sends the job request (request, column 3, lines 27-28) to the host computer (client processor that the print job is residing) which the job location data shows. (Column 3, lines 25-30)

Art Unit: 2624

Gase does not teach wherein the host computer sends job location data showing a location of the job data to the printer server and the print server temporarily stores the job location data.

Debry, in the same area of sending a print request from a printer to a host computer to request a document to be printed by the printer, (column 11, lines 63-67, column 11, lines 1-5, fig. 5) teaches the host computer (file source, column 5, lines 20-25, document source, column 7, lines 16) sends job location data (column 7, lines 20-25, column 10, line 65) showing a location of the job data to the user's computer, (Column 6, lines 60-62), and the user's computer temporarily stores the job location data (The print job location information is located in the will call certificate, column 7, lines 15-25, and the will call certificate is being send with a job request, column 8, lines 65-67. Therefore, the will call certificate/print job location information is temporarily being stored in the user's computer from the time the user's computer received the will call certificate to the time the certificate being sent) before sending the job location data to a print server.

Since the computer used by a user would be used as a print server in Debry, column 6, lines 65-67, column 7, lines 1-2, and the client processor in Gase is a print server, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system to include: the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host), and temporarily storing the job location data in the print server.

Art Unit: 2624

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system by the teaching of Debry because of the following reasons: (a) the user, column 3, lines 5-9, Gase, in one computer that may wish to have a print job that is presented in another computer submitted to the printer, would not have to walk to the another computer to check the URL of the print job or remembering the URL of the print job if Gase's computer system is being modified to have the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host); (b) it would have solved the problem created when a user would like to print a document in a remote location but the user's computer system is not secure, is having too much network traffic, or may not have storage space for receiving the print job, as taught by Debry at column 3, lines 44-65; and (c) temporarily storing the job location data would prevent the server from losing the job location data.

9. Claims 4, 5, 9, 10, 14, 15, 19, 20, 26, 27, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase as applied to claims 1, 6, 11, 16, 24, 30 above and further in view of Pipeline Corporation (column 1, lines 48-60, Gase).

Regarding claim 4: Gase does not teach wherein the printer can specify a desired part of the job data when the printer sends the job request to the host computer, and host computer sends only the specified part of the job data to the printer in response to the job request.



Art Unit: 2624

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system to include: the printer can specify a desired part of the job data when the printer sends the job request to the host computer, and the host computer sends only the specified part of the job data to the printer in response to the job request.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer,

Art Unit: 2624

when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 5: Gase does not teach wherein the host computer informs the printer of a location of each part constituting the job data, the printer can specify a desired part of the job data based upon the informed location of each part when the printer sends the job request to the host computer, and the host computer sends only the specified part of the job data to the printer in response to the job request.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system to include: the host computer informs the printer of a location of each part constituting the job data, the printer can specify a desired part of the job data based upon the informed location of each part when the printer sends

Art Unit: 2624

the job request to the host computer, and the host computer sends only the specified part of the job data to the printer in response to the job request.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 9: Gase does not teach wherein the printer can specify a desired part of the job data in the step of sending the job request, and the host computer sends only the specified part of the job data to the printer in the step of sending the job data.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the

Art Unit: 2624

home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of sending job data of a print job to include: the printer can specify a desired part of the job data in the step of sending the job request, and the host computer sends only the specified part of the job data to the printer in the step of sending the job data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 10: Gase does not teach a step of informing the printer of a location of each part of constituting the job data from the host computer, wherein, in the step of sending the job request, the printer can specify a desired part of the job data, and in the step of sending the job data, the host computer sends only the specified part of the job data to the printer.

Art Unit: 2624

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of sending job data of a print job to include: a step of informing the printer of a location of each part of constituting the job data from the host computer; in the step of sending the job request, the printer can specify a desired part of the job data; and in the step of sending the job data, the host computer sends only the specified part of the job data to the printer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use

Art Unit: 2624

URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 14: Gase does not teach wherein the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: the job request section can specify a desired part of the job data for the host computer when the job request section sends the job request, and the printing section receives only the desired part of job data sent from the host computer in response to a request from the job request section and prints it.

Art Unit: 2624

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 15: Gase does not teach the printer further comprising means which a location of each part constituting the job data is informed from the host computer, wherein the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print

Art Unit: 2624

job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: means/software code such that the printer would allow the location of each part constituting the job data to be informed from the host computer; the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.



Art Unit: 2624

Regarding claim 19: Gase does not teach wherein, in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and

Art Unit: 2624

thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 20: Gase does not teach a step of being informed of a location of each part constituting the job data from the host computer, wherein, in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Art Unit: 2624

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer to include: a step of being informed of a location of each part constituting the job data from the host computer; in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part; and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 26: Gase does not teach wherein, if a part of the job data is specified in the job request from the printer, the transmitter sends only the specified part of the job data to the printer.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print

Art Unit: 2624

pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer. (Column 1, lines 48-60) A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's host computer to include: wherein, if a part of the job data is specified in the job request from the printer, the transmitter sends only the specified part of the job data to the printer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Art Unit: 2624

Regarding claim 27: Gase teaches means (the program module, column 1, lines 22-25, of the client processor that originated the message with the URL, column 3, lines 16-21) for informing one of the printer (the printer, column 3, lines 15-18) and a server (since the claim calls for one of the printer and a server, showing one printer would meet the claimed limitations) of a location of the job data.

Gase does not teach informing the printer of a location of each part constituting the job data, wherein, if a part of the job data is specified based upon the informed location in the job request from the printer, the transmitter sends only the specified part of the job data to the printer.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's means for informing the printer a location of the job data, and the transmitter to include: informing the printer of a location of each part constituting the job data, wherein, if a part of the job data is specified based upon the informed

Art Unit: 2624

location in the job request from the printer, the transmitter sends only the specified part of the job data to the printer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 32: Gase does not teach wherein, if a part of the job data is specified in the job request from the printer, only the specified part of the job data is sent to the printer in the step of sending job data.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer. (Column 1, lines 48-60) A user, from the user's computer, using the

Art Unit: 2624

home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's host computer program step to include: wherein, if a part of the job data is specified in the job request from the printer, only the specified part of the job data is sent to the printer in the step of sending job data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

10. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase (US 6,184,996) in view of Debry (US 6,385,728).

Regarding claim 21: Gase teaches a print server (the computer that generates the URL message other than the computer where the print job corresponds to the URL is resided, column

Art Unit: 2624

3, lines 18-21, column 3, lines 5-9; each client processor/computer is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) for transmitting job location data (URL, column 3, lines 15-21) to a printer, comprising: a storage (computer application has a print job ready for submission to printer, column 3, lines 5-6, i.e., the print server is having a print job of its own (not the URL to be transmitted) that is already created and being held in the client processor before sending to the printer. The process that is preventing the server from losing the print job of its own before the print job is being sent to the printer is storing. It is inherent that storing a print job uses a storage); a transmitter (the program code of the program module, column 1, lines 22-25, of the computer that controls communicating the URL message, column 3, lines 16-21, to a printer) for sending the job location data to a printer; and a receiver (the program code of the program module, column 1, lines 22-25, of the computer that controls the receiving function of the computer such as receiving a home page, column 3, lines 50-53) for receiving data from a network. (WWW fig., 1)

Note: It is inherently that when a computer using program modules/software for controlling the functions of the computer, different functions of the computer require different program code.

Gase does not teach: the receiver receives the job location data from a host computer, and the storage temporarily stores the received job location data.

Debry, in the same area of sending a print request from a printer to a host computer to request a document to be printed by the printer, (column 11, lines 63-67, column 11, lines 1-5,



Art Unit: 2624

fig. 5) teaches the host computer (file source, column 5, lines 20-25, document source, column 7, lines 16) sends job location data (column 7, lines 20-25, column 10, line 65) showing a location of the job data to the user's computer, (Column 6, lines 60-62), and the user's computer receives the job location data temporarily stores the job location data (the print job location information is located in the will call certificate, column 7, lines 15-25, and the will call certificate is being send with a job request, column 8, lines 65-67. Therefore, the will call certificate/print job location information is temporarily being stored in the user's computer from the time the user's computer received the will call certificate to the time the certificate being sent), before transmitting the job location data to a print server.

Since the computer used by a user would be used as a print server in Debry, column 6, lines 65-67, column 7, lines 1-2, and the client processor (computer) in Gase is a print server, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's receiver and storage of the print server to include: the receiver receives job location data from a host computer, and the storage for temporarily storing the received job location data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system by the teaching of Debry because of the following reasons: (a) the user, column 3, lines 5-9, Gase, in one computer that may wish to have a print job that is presented in another computer submitted to the printer, would not have to walk to the another computer to check the URL of the print job or remembering the URL of the

Art Unit: 2624

print job if Gase's computer system is being modified to have the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host); (b) it would have solved the problem created when a user would like to print a document in a remote location but the user's computer system is not secure, is having too much network traffic, or may not have storage space for receiving the print job, as taught by Debry at column 3, lines 44-65; and (c) temporarily storing the job location data would prevent the server from losing the job location data.

Regarding claim 22: Gase teaches a method of operating a print server (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) for transmitting job location data (URL, column 3, lines 15-21) to a printer comprising steps of: sending job location data (URL, column 3, line 18) showing a location of job data to a printer. (column 3, lines 15-20)

Gase does not teach receiving job location data from a host computer, and temporarily storing the received job location data.

Debry, in the same area of sending a print request from a printer to a host computer to request a document to be printed by the printer, (column 11, lines 63-67, column 11, lines 1-5, fig. 5) teaches the host computer (file source, column 5, lines 20-25, document source, column 7, lines 16) sends job location data (column 7, lines 20-25, column 10, line 65) showing a location of the job data to the user's computer, (Column 6, lines 60-62), and the user's computer receives the

Art Unit: 2624

job location data temporarily stores the job location data (the print job location information is located in the will call certificate, column 7, lines 15-25, and the will call certificate is being send with a job request, column 8, lines 65-67. Therefore, the will call certificate/print job location information is temporarily being stored in the user's computer from the time the user's computer received the will call certificate to the time the certificate being sent), before transmitting the job location data to a print server.

Since the computer used by a user would be used as a print server in Debry, column 6, lines 65-67, column 7, lines 1-2, and the client processor (computer) in Gase is a print server, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's receiving step to include: receiving job location data from the host computer, and temporarily storing the received job location data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system by the teaching of Debry because of the following reasons: (a) the user, column 3, lines 5-9, Gase, in one computer that may wish to have a print job that is presented in another computer submitted to the printer, would not have to walk to the another computer to check the URL of the print job or remembering the URL of the print job if Gase's computer system is being modified to have the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that sends URL to a printer to request a print job from the host); (b) it would have solved the problem created when a user would like to print a document in a remote location but the user's computer

Art Unit: 2624

system is not secure, is having too much network traffic, or may not have storage space for receiving the print job, as taught by Debry at column 3, lines 44-65; and (c) temporarily storing the job location data would prevent the server from losing the job location data.

Regarding claim 23: Gase teaches record medium readable (note) by a computer on which a program for instructing a computer (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) to execute the following steps is recorded, the steps comprising: a step of sending job location data (URL, column 3, line 18) showing a location of job data to a printer, (column 3, lines 15-30) and a step of receiving (column 3, lines 50-52) data from a network. (WWW fig., 1)

Note: Gase, column 1, lines 20-25, teaches the computer is running by operating system and program modules/software; it is inherently that a computer controlled by operating system and program modules/software requires a record medium readable by a computer for storing the operating system and program steps.

Gase does not teach the step of receives job location data from a host computer, and the step of temporarily storing the received job location data.

Debry, in the same area of sending a print request from a printer to a host computer to request a document to be printed by the printer, (column 11, lines 63-67, column 11, lines 1-5, fig. 5) teaches the host computer (file source, column 5, lines 20-25, document source, column 7,

Art Unit: 2624

lines 16) sends job location data (column 7, lines 20-25, column 10, line 65) showing a location of the job data to the user's computer, (Column 6, lines 60-62), and the user's computer receives the job location data temporarily stores the job location data (the print job location information is located in the will call certificate, column 7, lines 15-25, and the will call certificate is being send with a job request, column 8, lines 65-67. Therefore, the will call certificate/print job location information is temporarily being stored in the user's computer from the time the user's computer received the will call certificate to the time the certificate being sent), before transmitting the job location data to a print server.

Since the computer used by a user would be used as a print server in Debry, column 6, lines 65-67, column 7, lines 1-2, and the client processor (computer) in Gase is a print server, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's receiving step to include: a step of receiving job location data from the host computer and a step of temporarily storing the received job location data.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printing system by the teaching of Debry because of the following reasons: (a) the user, column 3, lines 5-9, Gase, in one computer that may wish to have a print job that is presented in another computer submitted to the printer, would not have to walk to the another computer to check the URL of the print job or remembering the URL of the print job if Gase's computer system is being modified to have the host computer sends job location data (URL) showing a location of the job data to the printer server (the computer that

Art Unit: 2624

sends URL to a printer to request a print job from the host); (b) it would have solved the problem created when a user would like to print a document in a remote location but the user's computer system is not secure, is having too much network traffic, or may not have storage space for receiving the print job, as taught by Debry at column 3, lines 44-65; and (c) temporarily storing the job location data would prevent the server from losing the job location data.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,089,765 (Mori) teaches a printer requesting retransmission of print data.

US 5,999,707 (Taniguchi et al) teaches a printer of network print system requesting desired print data to a host.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

June 29, 2003

*King Y. Poon*